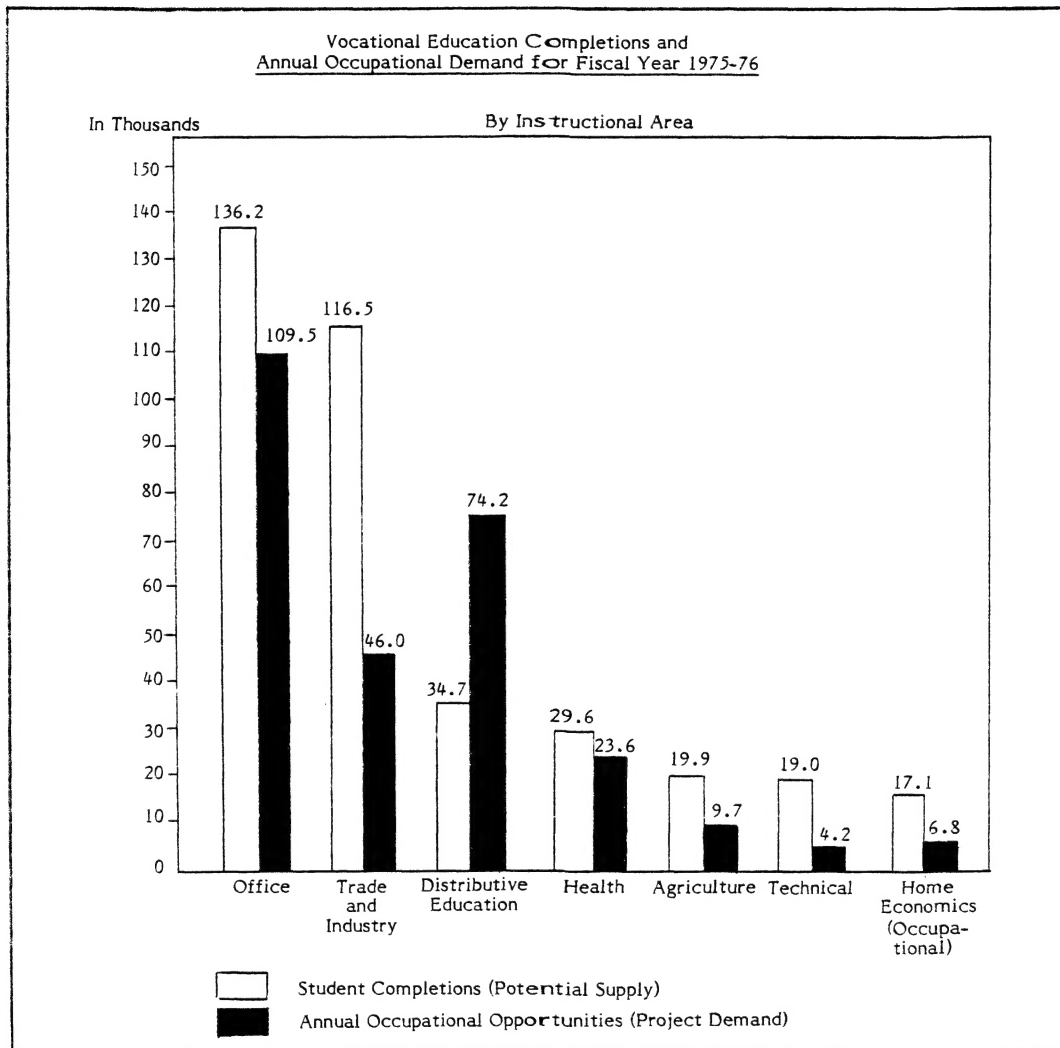


Joint Legislative Audit Committee
Office of the Auditor General



REPORT TO THE CALIFORNIA LEGISLATURE



OPPORTUNITIES TO IMPROVE RESPONSIVENESS OF VOCATIONAL EDUCATION

Office of the Auditor General
1955-1978

REPORT OF THE
OFFICE OF THE AUDITOR GENERAL
TO THE
JOINT LEGISLATIVE AUDIT COMMITTEE

723.2

OPPORTUNITIES TO
IMPROVE RESPONSIVENESS OF
VOCATIONAL EDUCATION

APRIL 1978



Joint Legislative Audit Committee

OFFICE OF THE AUDITOR GENERAL

California Legislature



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723.2

The Honorable Speaker of the Assembly
The Honorable President pro Tempore of the Senate
The Honorable Members of the Senate and the
Assembly of the Legislature of California

Members of the Legislature:

Your Joint Legislative Audit Committee respectfully submits the Auditor General's first report of a series on the State Vocational Education Program administered by the State Superintendent of Public Instruction and the Chancellor of California Community Colleges.

About \$500,000,000 will have been expended for 1,800,000 vocational education students during this fiscal year. There is a statistical imbalance of jobs available vs. qualified graduates. Dr. Wilson Riles responds that the acquired skills are interchangeable or are essential to day-to-day living. A Ventura County pilot program for data collection and evaluation has proven successful and is to be applied to the entire vocational education program. The static level of unemployment in California is such that the Legislature and the Governor should consider giving the Ventura County program early attention and high priority.

By copy of this letter, the Chancellor's Office of the California Community Colleges and the Department of Education are requested to advise the Joint Legislative Audit Committee within sixty days of the status of implementation of the recommendations of the Auditor General that are within their statutory authority.

The auditors are Kurt R. Sjoberg, Audit Manager; Richard C. Tracy and Jeffrey L. Mikles.

Respectfully submitted,

MIKE CULLEN
Chairman

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SUMMARY

The Joint Legislative Audit Committee requested that we review the responsiveness of public school vocational education to labor market conditions.

Federal and state legislation requires the development of vocational training programs which are realistic in the light of current and anticipated employment opportunities.

We found that:

- Vocational education enrollments persist in traditional program areas despite projections showing that major programs within these areas have limited relevancy to the labor market
- Postsecondary programs are in some cases more aligned to current and anticipated employment opportunities than those offered by the secondary system
- Apparent imbalances exist between the projected demand for various occupations and the number of vocationally trained students
- Occupational information is neither collected nor disseminated in a form that satisfies the informational needs of vocational education administrators and planners.

As a result of the above conditions, students may have difficulty obtaining employment in fields for which they were trained, and there is no assurance that the vocational education system is addressing manpower needs.

On pages 19 and 26, we recommend action that should improve vocational education's responsiveness to labor market conditions.

INTRODUCTION

In response to a resolution of the Joint Legislative Audit Committee, we have reviewed the responsiveness of California's vocational education system to labor market conditions. The review was conducted under authority vested in the Auditor General by Government Code Section 10527.

Purpose of Vocational Education

The principal objective of vocational education in California is to prepare students for successful employment in occupations requiring other than a baccalaureate or advanced degree. California statutes define the objective as follows:

...to provide an educational opportunity to the end that every student leaving school shall have the opportunity to be prepared to enter the world of work; that every student who graduates from any state-supported educational institution should have sufficient marketable skills for legitimate remunerative employment; that every qualified and eligible adult citizen shall be afforded an educational opportunity to become suitably employed in some remunerative field of employment... (Education Code, Section 51004.)

The Federal Government's role in vocational education, as defined by the Federal Vocational Education Act of 1976, Title II of Public Law 94-482 (VEA) is to: assist states in improving plans for the use of all resources for vocational education and manpower training; overcome sex discrimination and sex stereotyping in vocational education; provide part-time employment to enable youths to continue their full-time vocational

training; and provide ready access to vocational training or retraining for persons of all ages who need it.

Program Administration and Delivery

The State Board of Education and the Board of Governors of the California Community Colleges share responsibility for state vocational education administration. The system is administered jointly by the Vocational Education Unit of the State Department of Education (SDE) and the Occupational Division of the Chancellor's Office of the Community Colleges. The State Board of Education, however, is the sole entity mandated responsibility for administering federally funded vocational education consistent with the federal VEA. In addition, there are 71 regional adult and vocational education councils that are responsible for controlling unnecessary duplication of program offerings and recommending the appropriate level of instruction for new offerings. Each unified school district, high school district, community college district and county office of education must participate in a regional council.

Public vocational education programs are delivered by secondary schools, community colleges, and the regional occupational centers and regional occupational programs (ROC/Ps). During fiscal year 1976-77 the State Department of Education reported that enrollments in the seven major vocational education instructional areas totaled 1.8 million, with 51 percent of the enrollment at the secondary level and 49

percent at the postsecondary level. The seven major vocational instructional areas are agriculture, distributive education (i.e., sales), health occupations, home economics, office occupations, technical education, and trade and industrial occupations.

Funding

Vocational education funding comes from federal, state and local sources. In fiscal year 1977-78, California will receive approximately \$50.2 million in federal vocational education funds. School apportionment and property tax mechanisms provide state and local funds that support both general and vocational education programs. The State Department of Education reports that total vocational education expenditures will exceed one-half billion dollars in fiscal year 1977-78.

The table below summarizes the number of public school enrollments, completions and expenditures for the seven major vocational instructional areas examined for fiscal years 1972 through 1976.

Reported Vocational Education Enrollments,
Completions and Expenditures Fiscal Years 1972-1976

	<u>1971-72</u>	<u>1972-73</u>	<u>1973-74</u>	<u>1974-75</u>	<u>1975-76</u>
Enrollments	1,128,085	1,289,548	1,426,073	1,761,424	1,764,653
Completions	228,424	245,518	328,935	345,447	515,924
Expenditures	\$313,388,662	\$342,025,402	\$398,390,771	\$449,700,679	\$474,937,092

Source: State Department of Education (unaudited)

Scope of Review

The review focused on evaluating the responsiveness of public school vocational education curriculum to current and projected employment opportunities. While our review identified many exemplary programs which appear to be responsive to labor market conditions, we did find several problems that require attention. We believe that the problems identified are shared by many school districts; however, our findings and conclusions should not be interpreted as necessarily being typical of vocational education activities in all localities.

We reviewed only the public school vocational education providers: secondary schools, community colleges and ROC/Ps. Other providers, such as private schools, business and industry programs, and federal manpower programs (CETA), were not reviewed.

We interviewed staff from the State Department of Education, the Chancellor's Office of Community Colleges, the Employment Development Department, legislative committees and local education agencies. In addition, we examined applicable legislation and regulations, State Department of Education and Chancellor's Office policies, state plans, pertinent records and reporting documents.

The Office of the Auditor General conducted a financial audit of the State Vocational Education Program in 1976.^{1/} This latest review is the first in a series of reports dealing with various aspects of vocational education in California.

^{1/} Administration of Federal Vocational Education Act Funds by the State of California, November 1976.

AUDIT RESULTS

NEED TO IMPROVE VOCATIONAL EDUCATION'S RESPONSIVENESS TO LABOR MARKET CONDITIONS

Although federal and state legislation encourages the development of vocational programs which reflect the skill demands of the labor market, large enrollments exist in some programs that have a limited relationship to current or anticipated job opportunities. In addition, apparent misalignments exist between the demand for and the supply of workers in some specific skill areas. As a result, students may have difficulty obtaining employment in fields for which they were trained, and there is no assurance that manpower needs are being addressed.

Requirements for Vocational Education's Responsiveness

One of vocational education's primary goals is to provide occupational training which is realistic in the light of current and anticipated employment opportunities. Accordingly, federal and state legislation encourages the development of vocational programs which reflect the skill demands of the labor market.

The Federal Vocational Education Act of 1976 specifies that each state, when considering approval of local funding applications, give priority to those entities:

...which propose programs which are new to the area to be served and which are designed to meet new and emerging manpower needs and opportunities...

In addition, the five-year state VEA plans are required to:

...Assess the current and future needs for job skills within the state...through consideration of the latest available data of present and projected employment...

This assessment is to be made in conjunction with vocational education program enrollment and completion data.

The State Education Code Section 51004 states that it is the policy of California to provide an educational opportunity for each individual so that graduates of state-supported educational institutions will have marketable skills sufficient to obtain suitable employment.

Similarly, State Education Code Section 8120 reads as follows:

It is the intent of the Legislature to encourage the development of programs in the vocational education curriculum which reflect the skill demands determined from local and area employment surveys.

The rationale for these mandates is to (1) prepare students for work, (2) address the manpower needs of the labor market, and (3) avoid potential imbalances between the supply of and demand for workers with specific skills.

Enrollments Persist in
Instructional Areas with a Limited
Relationship to the Labor Market

Our analysis of enrollments over a six-year period indicates that large enrollments persist in traditional program areas that have limited relationship to the labor market. As shown on Table 1, total enrollments in vocational programs increased steadily from 1972 to 1977. While slight enrollment increases occurred in distributive education and slight decreases occurred in home economics nonoccupational, each of the seven major instructional areas generally maintained a constant proportion of the total vocational education enrollment.

Traditional instructional areas, such as home economics, trade and industry, and agriculture, maintained approximately 50 percent of the total enrollment despite projections showing that major programs within these areas may have limited relevancy to the labor market. For instance, although enrollments in the automotive-related programs comprise 18 percent of trade and industry training and 4 percent of all vocational education, Employment Development Department labor demand projections indicate low growth and replacement in automotive occupations. Likewise, while the bulk of the agricultural job opportunities are not in agricultural production, agricultural production remains the largest program (31 percent) within the agricultural area, accounting for 1.5 percent of the total vocational education enrollment in 1976-77.

Local and state officials told us that programs in traditional areas are always relevant to the labor market because the skills gained in those programs are transferable to any job. Moreover, these programs are viewed by some as general education in nature, complementing all vocational skills when viewed as part of a total system of flexible vocational instruction.

TABLE 1
Vocational Education Enrollments by Instructional Area
Over Six-Year Period - FY 1971-72 to FY 1976-77 ^{1/}

	<u>1971-72</u>		<u>1972-73</u>		<u>1973-74</u>		<u>1974-75</u>		<u>1975-76</u>		<u>1976-77</u>	
Agriculture % of Total Enrollment	54,300	5%	63,324	5%	70,933	5%	86,428	5%	88,027	5%	89,269	5%
Distributive Education % of Total Enrollment	70,295	6%	85,071	7%	101,676	7%	140,244	8%	135,896	8%	153,584	9%
Health Occupations % of Total Enrollment	42,871	4%	52,293	4%	60,695	4%	75,232	4%	79,285	5%	82,909	5%
Home Economics (Occupational) % of Total Enrollment	32,271	3%	37,052	3%	44,733	3%	58,890	3%	58,134	3%	60,061	3%
Home Economics (Nonoccupational) % of Total Enrollment	202,452	18%	252,231	19%	236,350	17%	302,869	17%	283,523	16%	267,981	15%
Office % of Total Enrollment	385,714	34%	423,924	33%	477,134	33%	559,472	32%	576,335	33%	590,211	33%
Technical % of Total Enrollment	54,261	5%	63,446	5%	70,551	5%	88,808	5%	95,367	5%	99,643	5%
Trade & Industry % of Total Enrollment	285,921	25%	312,207	24%	364,001	26%	449,481	26%	448,086	25%	441,588	25%
Total Enrollment	1,128,085		1,289,548		1,426,073		1,761,424		1,764,653		1,785,246	
Total % of Enrollment		100%		100%		100%		100%		100%		100%

Source: Master High School and Community College Enrollment Recaps
Vocational Education Unit, State Department of Education

^{1/} Enrollments do not include industrial arts, work experience or other special programs.

Postsecondary Programs Are Generally
More Aligned to Labor Market Conditions

Enrollments in postsecondary programs, when contrasted to secondary programs, are in some cases more aligned to new and emerging manpower needs. As shown in Table 2, 13 percent of postsecondary enrollments are in distributive education, contrasted with only 4 percent of secondary enrollment in that field. After office occupations, distributive education exhibits the highest occupational demand patterns both in terms of real numbers and growth. In addition, health occupations, also characterized by high demand and growth, accounted for 7 percent of the vocational enrollment at the postsecondary level, contrasted with 3 percent at the secondary level.

Other reports have shown, however, that ROC/Ps which are operated at the secondary level also may be more responsive to labor market conditions than other secondary level programs. A report prepared by the Office of the Legislative Analyst entitled Vocational Education in California, April 1977, suggests that this may occur because of their relative newness, their flexible staffing practices and the different statutory provisions under which they operate.

Vocational education officials told us that at the secondary level many vocational courses are exploratory in nature in keeping with the younger student ages and their normally undefined occupational goals. Hence, many programs at the secondary level may not relate to a specific occupational goal until the junior or senior years.

We were also told by one education official that minimum age requirements, particularly in health fields, limit the provision of some high demand occupational programs at the secondary level. In addition, strict licensing requirements often limit students from occupational preparation until high school graduation.

TABLE 2
Vocational Education Enrollment
by Instructional Area and Educational Level 1976-77^{1/}

	<u>Agriculture</u>	<u>Distributive Education</u>	<u>Health</u>	<u>Home Economics (Nonoccu- pational)</u>	<u>Home Economics (Occupational)</u>	<u>Office</u>	<u>Technical</u>	<u>Trade Industry</u>	<u>Total</u>
Secondary	60,461	35,744	23,592	222,238	24,991	325,747	1,968	212,741	907,482
Postsecondary	28,808	117,840	59,317	45,743	35,070	264,464	97,675	228,847	877,764
Total	89,269	153,584	82,909	267,981	60,061	590,211	99,643	441,588	1,785,246
 % of Enrollment by Educational Level									
Secondary	7%	4%	3%	24%	3%	36%	0%	23%	100%
Postsecondary	3%	13%	7%	5%	4%	30%	11%	26%	100%

Source: State Department of Education Enrollment Recap

^{1/} Enrollments do not include industrial arts, work experience or other special programs.

Apparent Demand/Supply Imbalances
Exist In Some Instructional Areas

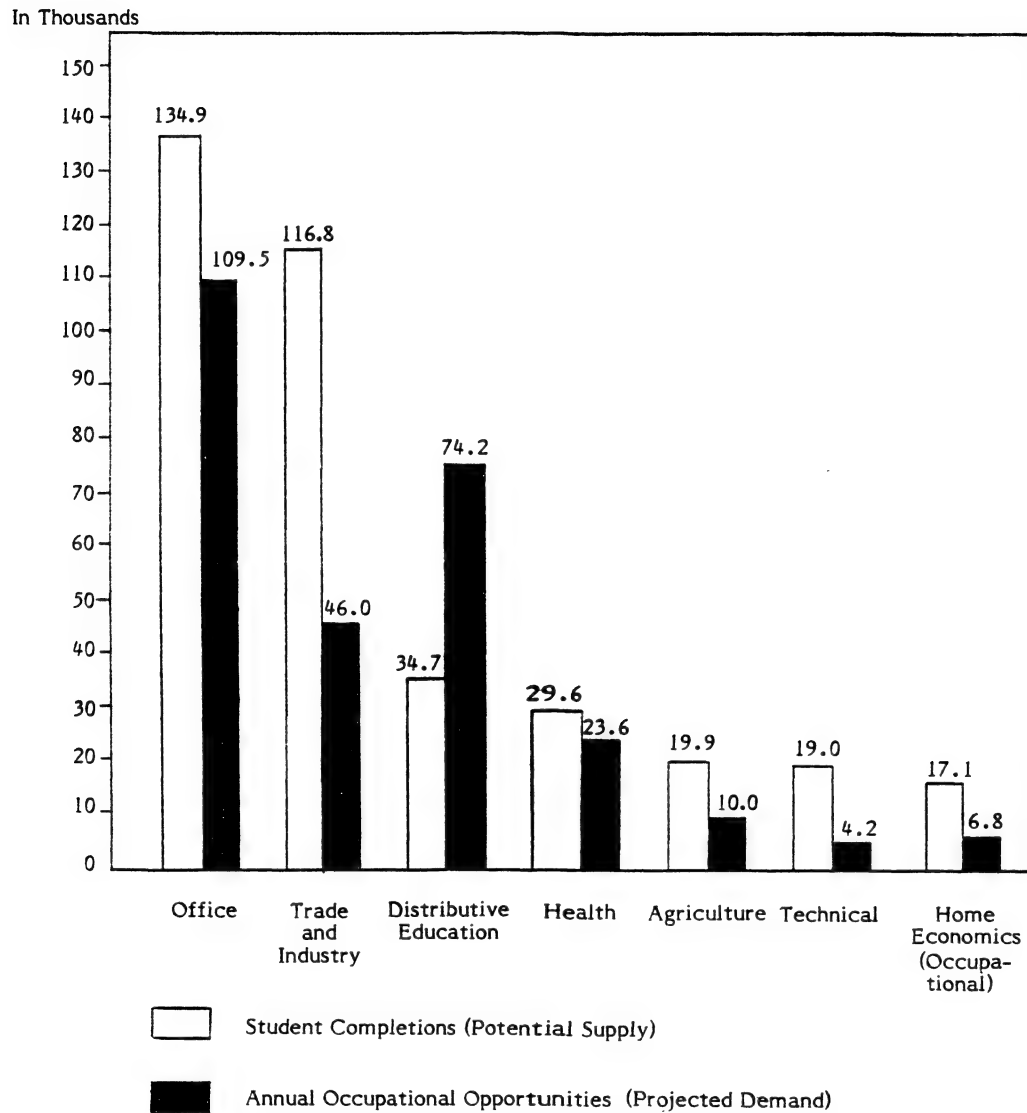
A comparative analysis of projected occupational demand to actual vocational education program completions indicates that apparent imbalances exist between the demand for and supply of workers with specific skills.

Table 3 on the following page graphically displays statewide data on program completions and job demand for the seven major vocational education areas for fiscal year 1975-76.^{1/} These statistics show that the output of vocational education in terms of program completions – potential supply – varies considerably between instructional areas. Furthermore, the amount of potential supply is often misaligned with the number of annual job opportunities projected to be available. As shown, this apparent misalignment is most evident in the areas of distributive education, technical occupations, trade and industry, and home economics (occupational). Conversely, program completions in the areas of office and health occupations appear to be more closely aligned with forecasted employment opportunities. (Problems related to the adequacy of occupational demand and program completion data are discussed on page 21.)

^{1/} Program completion data are not available for home economics (nonoccupational).

TABLE 3

Vocational Education Completions and
Annual Occupational Demand by Instructional Area for Fiscal Year 1975-76



SOURCE: Employment Development Department Labor Market Projections and Vocational Education Completion Statistics

Applying Community College Standards

In a publication entitled Program and Course Approval Procedures, the Chancellor's Office of the California Community Colleges suggests that when determining the need for training programs, districts should justify programs in part based on a standard demand/completion ratio of .67.

The procedures state:

Programs with a demand/completion ratio greater than .67 may be retained for consideration, those with a ratio less than .67 should be dropped from immediate consideration, e.g., for key punch operator (demand-47, completion-442) the ratio is .33... ^{2/}

We applied this .67 cutoff percentage to the demand/supply data for the seven instructional areas. As shown below, the results generally support our earlier conclusions concerning the responsiveness of vocational education programs. While office and health occupations are within the suggested demand/supply ratio, extensive demand/supply misalignments exist in the areas of technical and distributive education. These statistics should not be interpreted as being conclusive; however, they do suggest that vocational education programs in some instructional areas are inconsistent with labor market opportunities.

^{2/} According to the procedure manual, the .67 cutoff is based on the fact that about 67 percent of all those completing training programs seek and obtain jobs.

<u>Office</u>	<u>Trade and Industry</u>	<u>Distributive Education</u>	<u>Health</u>
.81	.39	2.1	.80
<u>Agriculture</u>	<u>Technical</u>	<u>Home Economics (Occupational)</u>	
.50	.22	.40	

Effect on Students and
the Labor Market

Large enrollments in programs with limited labor market relevancy may adversely affect the students' ability to obtain employment in fields for which they were trained. Moreover, in light of the continuing high unemployment rates for youth, an occupational program that is unresponsive to the labor market is, in our opinion, inconsistent with the primary purposes of vocational education.

Furthermore, when vocational education programs are inadequately aligned to new and emerging employment opportunities, there is little assurance that manpower needs will be addressed. According to an Employment Development Department report entitled Unfilled Job Openings, the principal cause for unfilled jobs is the lack of qualified applicants. Consequently, the undersupply of skilled workers in the distributive education programs appears to reflect vocational education's difficulties in adjusting to the labor market's changing manpower requirements.

Factors Limiting Vocational
Education's Responsiveness

We have identified numerous factors contributing to vocational education's unresponsiveness to labor market conditions. Some of these factors, particularly in regard to coordinated planning and maximum utilization of training resources, are addressed in past reports issued by the U.S. General Accounting Office and the Office of the California Legislative Analyst.^{3/} Other principal causes are:

- Lack of adequate labor demand/supply data
- Local district fiscal practices
- Student demand influences
- Teacher tenure policies
- Guidance and counseling limitations

We will discuss the problems relative to data limitations in the next portion of the report. Appendix A describes the other factors shown above.

Proposed Commission on
Vocational Education

The Superintendent of Public Instruction recently proposed the formation of a statewide study commission on vocational education in public primary and secondary schools. The commission is expected to

^{3/} Comptroller General of the United States, What is the Role of Federal Assistance for Vocational Education? Washington, D.C., U.S. General Accounting Office, December 31, 1974. Vocational Education in California, Legislative Analyst, State of California, April 1977.

address the aspects of vocational education impacting on the K-12 system, although 49 percent of vocational education is provided at the postsecondary level. At present, an SDE planning group is developing the charge to the commission. The commission's recommendations will be made to the Superintendent of Public Instruction and will provide the basis for an implementation strategy.

The California Advisory Council on Vocational Education and Technical Training (CACVE), established by federal and state statutes in 1969, has a goal similar to the proposed commission's – to strengthen vocational education in California. The Council is charged with evaluating and assessing the effectiveness of vocational education and advising various education and manpower governing boards on planning and policy matters.

CONCLUSION

One of vocational education's primary objectives is the provision of training that is responsive to labor market conditions; however, large enrollments persist in some vocational programs that offer limited opportunity for employment. In addition, apparent imbalances exist between the projected demand for an occupation and the number of vocationally trained students. Consequently, students may not find employment in fields for which they were trained, and there is little assurance that manpower needs are being addressed.

RECOMMENDATION

We recommend that the State Superintendent of Public Instruction and the Chancellor of the California Community Colleges take the following actions to improve vocational education's responsiveness to labor market conditions.

- The proposed commission on vocational education should be coordinated with the California Advisory Council on Vocational Education and Technical Training and/or be expanded to include representatives from postsecondary public vocational education and business, industry and labor.
- The commission should discuss the need to improve vocational education's responsiveness. The specific factors to be addressed should include: adequacy of occupational data; effect of local district financial practices on program responsiveness; influence of student demand on program offerings; effect of teacher tenure policies on vocational education; effectiveness of vocational education guidance and counseling.
- Recommendations to improve vocational education's responsiveness should be made to the Superintendent of Public Instruction by December 1978.

BENEFIT

Implementing these specific recommendations should provide the basis for a vocational education strategy to improve vocational education's responsiveness to labor market conditions.

DATA LIMITATIONS INHIBIT
PROGRAM PLANNING

Educational administrators and planners require sufficient occupational information to adequately assess the need for vocational training and to justify the development of training programs. We found that occupational data is neither collected nor disseminated in a form that satisfies the informational needs of vocational education administrators and planners. As a result, it is difficult to assess the appropriateness and responsiveness of vocational offerings.

According to the U.S. Bureau of Labor Statistics, occupational information should include three basic elements:

- Current and projected demand for workers by occupation
- Current and projected supply of workers by occupation
- Other information about the nature of occupations and the market place.

While these basic elements do not satisfy all the informational needs, any occupational information system would be incomplete without them.

Demand Data

Occupational forecasts and projections on employment opportunities are produced by the Employment Development Department with technical assistance and methodological models provided by the Federal Bureau of Labor Statistics and the Employment and Training Administration. The coding systems used in these manpower reports are not always directly compatible with the standard program categories that are used by educational agencies to report program, enrollment and completion data. As a result, it is difficult to compare data on program offerings to current and anticipated employment opportunities.

Local district officials told us that they normally relied on industry advisory committees and informal, local labor market surveys to justify development and termination of program offerings. Local administrators and Employment Development Department officials also indicated that manpower forecasts for rural areas were usually inadequate, leaving portions of the State that are outside the major urban areas without sufficient manpower projection information.

Supply Data

At present, there is no reporting system to measure the number of enrollments, completions and placements resulting from programs provided by both public and private vocational education agencies. Consequently, public schools have no assurance that they are not contributing to the over or undersupply of trained students in occupational areas.

Furthermore, although local districts are required to report program data consistent with federal reporting standards, state officials told us that the data collected was never intended to be used in an occupational information system. Depending on how districts define their programs and complete the report forms, the data on programs, courses and occupations that are received from one district may be incomparable to data received from other districts. This limits the use of this information for program planning purposes.

Actions Taken to Improve Data

Federal

Recent federal VEA amendments mandate the establishment of a national vocational education data reporting and accounting system. This legislation also created a National Occupational Information Coordinating Committee (NOICC) and a system of State Occupational Information Coordinating Committees (SOICC) responsible for developing and implementing improved information systems. The systems will use uniform definitions, standardized estimating procedures and standardized occupational classifications.

State

Research efforts to design an occupational information system have been conducted in California since 1971-72. During 1975-76, a pilot project operated by Ventura County was recognized as the California Manpower Management Information System (CMMIS). CMMIS has

recently been designated as the official California Occupational Information System (COIS) through a joint agreement by the newly formed SOICC. CMMIS will move to Sacramento and will become the statewide system in compliance with VEA mandates. SOICC has developed a draft work plan to accomplish this transition.

In addition, pending legislation, AB 2020, would provide state statutory authority and funding for a uniform public and private occupational information system. The bill designates a six-member management team to develop and implement the COIS. The team, which also serves as the SOICC, includes the Employment Development Department, Department of Education, Department of Rehabilitation, California Community Colleges, the Comprehensive Employment and Training Advisory Council and the Council for Private Postsecondary Institutions.

CMMIS

CMMIS has developed several products that have eliminated some of the data limitations described earlier in this report. They include:

- A cross-code index that links together the unrelated coding systems, thereby permitting comparative analysis of occupational demand/supply data

- A demand/supply report that allows direct comparison by instructional program of the number of students trained per year to the number of annual job opportunities
- Standardized data collection and program monitoring formats
- A public education supply data system and socio-economic factors report
- A program to disseminate occupational information data, reporting requirements and standards to localities.

CMMIS' components are in various stages of implementation and dissemination. CMMIS is currently awaiting formal transition to Sacramento. Some officials have raised concerns, however, that timely implementation of the system will not be achieved unless the SOICC expedites various transition activities.

CONCLUSION

In our opinion, significant strides have been taken to eliminate some of the major data problems that have affected the responsiveness of vocational education programs. Additional steps, however, need to be taken to ensure that the proposed occupational system adequately addresses both the needs of state and local administrators and the requirements of the Federal Vocational Education Act amendments.

RECOMMENDATION

We recommend the following steps to improve the quality of occupational data.

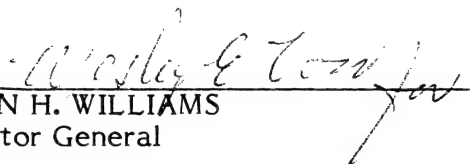
- Legislation to authorize the COIS should include a requirement that SOICC expedite the transition of CMMIS by developing a detailed timetable for the completion of specific administrative actions related to staffing, salaries, organizational regulations, provision of facilities and assessment of computer needs.
- SOICC should develop and implement requirements for the uniform collection and reporting of occupational supply data based on standardized definitions consistent with VEA legislation. Such requirements should include a single system to inventory programs, courses which comprise the programs and the occupations associated with the programs.
- SOICC should develop and implement a detailed plan for dissemination of occupational information to all user groups. The plan should provide for intensive user training activities to ensure that current and future COIS products are used properly and to the maximum extent possible.

- The SOICC should work closely with the Employment Development Department to expand the number of labor market areas which receive occupational demand projections.

BENEFIT

Implementing these recommendations should improve vocational education's responsiveness to labor market conditions. An adequate, reliable occupational information system would improve the quality of data available to administrators and planners for developing and assessing vocational training programs.

Respectfully submitted,



JOHN H. WILLIAMS
Auditor General

Date: April 13, 1978

Staff: Kurt R. Sjoberg, Audit Manager
Richard C. Tracy
Jeffrey L. Mikles



STATE OF CALIFORNIA
DEPARTMENT OF EDUCATION

STATE EDUCATION BUILDING, 721 CAPITOL MALL, SACRAMENTO 95814

April 12, 1978

Mr. John H. Williams, Auditor General
Joint Legislative Audit Committee
925 L Street, Suite 750
Sacramento, CA 95814

Dear Mr. Williams:

On April 7, 1978, we received a draft of your report to the Joint Legislative Audit Committee on "Opportunities to Improve Responsiveness of Vocational Education." We appreciate the opportunity to respond to the draft and understand that our response will be distributed with the report.

The report identifies two major areas of concern and includes conclusions and recommendations on each.

The Department's response to the two areas of concern included in the report follows. For clarity, we have repeated the headings which were used in the draft.

1. Need to Improve Vocational Education's Responsiveness to Labor Market Conditions

The Department agrees that one of vocational education's primary objectives is the provision of training that is responsive to labor market conditions. It needs to be clearly understood, however, that an equally important objective of vocational education at the intermediate and secondary levels is to assist students to make an informed and meaningful occupational choice. A large number of students at the secondary level are enrolled in exploratory and general work experience education programs which are designed to provide students with an opportunity to explore various occupations in real work settings. While the acquisition of job skills may be a byproduct of such programs, the major purpose is to assist students make career choices.

Other programs at the secondary level, such as consumer homemaking education, are designed to provide students with "living" and "survival skills" that are extremely critical but may have little or no relationship to labor market supply and demand.

Many other vocational education programs at the secondary level focus on competencies that are common to a "family" or "cluster" of occupations and are transferable to a broad range of occupations.

Studies have identified the fact that the average worker changes occupations at least five to six times during their working life. To prepare the average 15- or 16-year-old high school student for a very narrow, specific occupation could seriously limit their career options.

At the community college level, however, where the average age of students is approximately 27.5 years, the purposes of vocational education should very definitely be more closely related to current job opportunities.

The report includes three recommendations to improve vocational education's responsiveness to labor market conditions.

- a) The commission on vocational education to be appointed by the Superintendent of Public Instruction should be coordinated with the California Advisory Council on Vocational Education and/or be expanded to include representatives from postsecondary public vocational education and business, industry, and labor.

Department Response

The California Advisory Council on Vocational Education is charged with assisting the State Board of Education in the development of the Five-Year State Plan for Vocational Education, the Annual Plan, and the Accountability Reports; to advise the Board on policy matters relating to vocational education; and to assess and evaluate the effectiveness of vocational education. With a few exceptions, the members of the Council are appointed by the Governor.

The Commission on Vocational Education will be established and the members appointed by the Superintendent of Public Instruction, who is the chief administrator of the State Department of Education.

The State Advisory Council will be represented by a member on the Commission and, in addition, will be invited to provide input to the Commission.

The Commission will include representatives of business, industry, and labor among its members.

Since the Commission will be directing primary attention to vocational education as administered by elementary and secondary schools and regional occupational programs and centers, it does not appear appropriate to include representatives of postsecondary education, which is not within the Department's purview.

- b) The commission should discuss the need to improve vocational education's responsiveness.

Department Response

The Department is in full agreement.

- c) Recommendations to improve vocational education's responsiveness should be made to the Superintendent of Public Instruction by December 1978.

Department Response

The Department agrees with this recommendation, and the proposed timeline for the Commission's work should comply with this objective.

2. Data Limitations Inhibit Program Planning

The Department agrees that educational administrators and program planners require sufficient occupational information to adequately assess the need for vocational training and to justify the development of training programs.

As is pointed out in the report, significant progress has been made to eliminate some of the major data problems that have affected the responsiveness of vocational education programs. Historically, however, occupational supply and demand data has been difficult and costly to acquire.

The report includes four recommendations relating to this concern.

- a) Legislation to authorize COIS should include a requirement that SOICC expedite the transition of CMMIS by developing a detailed timetable for the completion of specific

administrative actions related to staff, salaries, organizational regulations, provision of facilities, and assessment of computer needs.

Department Response

The Department strongly supports this recommendation.

- b) SOICC should develop and implement requirements for the uniform collection and reporting of occupational supply data based on standardized definitions consistent with VEA legislation. Such requirements should include a single system to inventory programs, courses which comprise the programs, and the occupations associated with the programs.

Department Response

The Department concurs and has initiated activities to accomplish this recommendation.

- c) SOICC should develop and implement a detailed plan for dissemination of occupational information to all user groups. The plan should provide for intensive user training activities to ensure that current and future COIS products are used properly and to the maximum extent possible.

Department Response

The Department is in full agreement and to the extent that resources are made available will place a high priority on this recommendation.

- d) The SOICC should work closely with the Employment Development Department to expand the number of labor market areas which receive occupational demand projections.

Department Response

The Employment Development Department is a cooperating member of the SOICC and is the agency responsible to provide occupational demand projections. The success of the SOICC is dependent upon the full cooperation of the respective member state agencies.

This summarizes our responses to the draft of the Auditor General's report.

We would like to compliment the staff of the Auditor General for the professional manner in which they conducted their work in our offices.

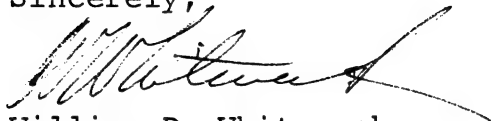
Mr. John H. Williams

-5-

April 12, 1978

We believe the report addresses areas of major concern and hopefully should contribute to the improvement of vocational education in California.

Sincerely,

A handwritten signature in dark ink, appearing to read "W. Whiteneck", with a long, sweeping horizontal stroke extending to the right.

William D. Whiteneck
Deputy Superintendent for Administration
916/445-8950

Memorandum

To : John H. Williams
Auditor General
Joint Legislative Audit Committee
925 L Street, Suite 750
Sacramento

Date : April 13, 1978

File No.:

From : William G. Craig
Chancellor



Subject: Response to April 1978 Report of the Office of the Auditor General

The following is a preliminary response from the California Community Colleges Chancellor's Office viewpoint. This response is limited by the amount of time available to prepare it, and we plan to submit supplementary comments on other issues.

All of the issues identified in the summary are presently being addressed by California Occupational Information System (COIS). The four identified on page 1 will be addressed formally as COIS comes on line in the next few weeks. Much of the preliminary material will be reviewed by the California Occupational Information Coordinating Committee (COICC) in May. Use of the data for guidance is not as far along as the planning data but it is in the 1977-78 COIS work plan, and if adequate resources are made available in 1978-79 to fully identify and implement a guidance vehicle for COIS data, the guidance component could be on line as early as 1979-80.

This report addresses only the public education clients. The thrust of COIS goes far beyond this in also addressing the needs of the Employment Development Department (EDD), Comprehensive Employment and Training Act (CETA) Council, and the Department of Rehabilitation. If AB 2020 passes, the private education sector will be added to COICC and the private education sector will become a client.

Throughout the report, there is one main reference -- matching labor market demand with student supply. No mention is made of other significant social issues (programs for the disadvantaged, handicapped, limited English speaking students and sex equity-fairness) required to be addressed by the new Federal Vocational Education Act. Although the report does cite the California State Plan for Vocational Education sections, it does not acknowledge that the single issue raised by this report will be addressed in the 1979 Vocational Education Accountability Report. (See attachment.)

The Auditor General's Report assumes that vocational education has difficulty in adjusting to the labor market's changing manpower requirements. This assumption ignores the vast input made by local vocational education advisory committees in addressing this very issue.

While the report acknowledges that a different situation exists for postsecondary level, it should be pointed out that in the Community Colleges (1975-76) 67% of the total enrollments were in occupational programs. Additionally, 69% of the program completers were employed full time in the occupation for which they were

trained. Others (24%) were employed in part-time or unrelated occupations. Only 7% were unemployed and seeking employment at the time of the follow-up survey.

The recommendations (page 19) for the proposed commission are made also to the Chancellor. Although we have no major disagreement with the recommendations, it should be pointed out that Superintendent Riles has proceeded with the establishment of a commission for K-12. The Chancellor plans to work with Dr. Riles to augment the commission to include persons with Community College perspectives.

The recommendations (page 25) are directed to COIS and COICC. All of the recommendations cited are now being addressed through an interagency agreement (see attached).

WGC/mh

Attachments

3.6 ACCOUNTABILITY

The State Board shall be responsible for implementing and conducting a comprehensive accountability program to enable it to carry out its function under the state plan and achieve the purposes of the Act. The program shall consist of the following components; programs and service accountability, student accountability, and fiscal accountability.

3.6.1 Program Service Accountability

Each vocational program and service, during a five-year period, shall be:

1. Reviewed to determine its compliance with the provisions of the Act, The California Five-Year State Plan for Vocational Education, California education and administrative codes, and other related federal and state laws, rules and regulations.
2. Assessed to determine its compliance with program and service standards.
3. Evaluated in quantitative terms to determine the effectiveness of each program and service in relation to: planning and operational processes, student achievements, student employment success, employer satisfaction with vocational education students, and other results as measured by services to special populations.

These activities shall be conducted to meet the requirements of Section 112(b)(1) of the Act.

3.6.2 Student Accountability

Each local educational agency shall annually submit sufficient data to the State Board to enable the state to analyze and disseminate data to meet requirements of Sections 112(b)(1)(B) and 161(a) of the Act.

3.6.3 Fiscal Accountability

Each local educational agency shall be audited during a five-year period to assure proper fiscal control and fund accounting procedures as required in Sections 105(a)(6), 106(a)(7), 106(a)(8), and 111(a) of the Act.

3.6.4 Use of the Results of Accountability Activities

The results of the state's accountability activities shall be used to:

1. Revise programs and services conducted under the state plan.
2. Provide needed data to the California State Advisory Council on Vocational Education to fulfill its requirements.
3. Supply data to the National Center for Educational statistics (U.S. Department of Health, Education, and Welfare).
4. Provide data for the preparation of the state's annual program plan and accountability reports.

Appendix E

Agreement Between the State Department of Education, Chancellor's Office of the California Community Colleges, Employment Development Department, California Employment and Training Advisory Council, and Department of Rehabilitation

The State Department of Education, Chancellor's Office of the California Community Colleges, Employment Development Department, Comprehensive Employment and Training Advisory Council, and Department of Rehabilitation agree to establish a California Occupational Information Coordinating Committee (COICC) as required by the Vocational Education Act of 1963, Section 161(b)(2), as amended by the Education Amendments of 1976 (P.L. 94-482). Specifically, the parties agree to the following:

1. The California Occupational Information Coordinating Committee shall include a representative from each of the organizations named above.
2. The California Occupational Information Coordinating Committee shall replace the management team now responsible for directing the California Manpower Management Information System (CMMIS); and it shall assume responsibility for directing the design, development, and implementation of the California Manpower Management Information System, which shall serve as the occupational information system under P.L. 94-482.
3. The California Manpower Management Information System, under the direction of the California Occupational Information Coordinating Committee, will develop occupational demand and supply data based on the uniform definitions and procedures established by the National Occupational Information Coordinating Committee.
4. The California Manpower Management Information System will conform to the regulations and procedures established by the National Occupational Information Coordinating Committee.
5. The information included in the California Manpower Management Information System need not be limited to the information required under provisions of P.L. 94-482. However, the development of the information required by P.L. 94-482 will be given priority, consistent with the priorities established by the National Occupational Information Coordinating Committee and with the needs of the State of California.
6. The California Manpower Management Information System will be designed to meet the common needs for occupational information data of the participating agencies.
7. The California Manpower Management Information System will include information for planning, guidance, and administration purposes. The information shall include, but shall not be limited to, data on the following:
 - a. Current and future occupational supply and demand on both a statewide and labor market area basis
 - b. Socioeconomic characteristics of the populations of labor market areas and students enrolled in vocational education and manpower training programs
 - c. Specific occupations, including the nature of the work, specific job requirements, compensation, entry methods, and available training and educational programs
 - d. Vocational education institutions, including staff, programs, courses, enrollments, and funding

8. The functions of the California Occupational Information Coordinating Committee and California Manpower Management Information System will include improving coordination and communication between vocational education program administrators, planners, and researchers and the administrators, planners, and researchers of employment and training programs. These efforts will be directed toward ensuring the availability and systematic use of uniform program and occupational information and employment data.

For the Department of Education and
the State Board of Education:

Signed: Wilson F. Lee
Superintendent of Public Instruction;
Director of Education; and Executive
Secretary, State Board of Education

For the Employment Development
Department:

Signed: Walt R. Holt
Director of Employment
Development Department

For the Board of Governors of the
California Community Colleges:

Signed: William J. May
Chancellor and the executive officer,
Board of Governors of the California
Community Colleges

For the Comprehensive Employment
and Training Advisory Council:

Signed: Walt R. Holt
Director, Comprehensive Employment
and Training Advisory Council

For the Department of Rehabilitation:

Signed: Edward V. Roberts
Director of Department
of Rehabilitation

OTHER FACTORS INFLUENCING VOCATIONAL
EDUCATION'S RESPONSIVENESS

Financial Incentives

Vocational education administrators told us that financial considerations often influence vocational program offerings. Due to decreasing enrollments and increased competition from other providers, many schools offer courses that attract students to generate apportionment revenue. In some cases, districts offer popular, high enrollment courses, which are not reflective of labor demand, to generate revenue to subsidize high cost programs and services. For example, one community college offers a popular vocational education television course, which has limited occupational relevancy, to subsidize high cost courses within the same program area.

Student Demand

Student demand is also cited as justification for offering vocational education programs, regardless of the programs' responsiveness to labor market conditions.

Studies have shown that the objectives that motivate students to enroll in programs, and educational agencies to offer them, frequently involve less emphasis on labor market factors than are stated in federal legislation. One local administrator told us that student demand is an important consideration in the program approval process. Another official stated that students often take courses for nonoccupational reasons. For instance, they may take courses for social or avocational objectives regardless of the potential for future employment.

Teacher Tenure

Teacher tenure policies may limit program terminations while fostering continuation of vocational education programs that have limited relationship to labor market demand. School officials told us that teacher tenure affects course offerings because it is difficult to remove tenured teachers and eliminate outdated classes. Similarly, a 1974 U.S. General Accounting Office report stated "the specialty areas of teachers...become the determinant for course offerings, rather than current or anticipated job opportunities."^{4/}

Guidance and Counseling

Guidance and counseling is an important element of the vocational education system because it assists students in making informed occupational choices while potentially minimizing over and underenrollment in courses that are not reflective of the labor market.

^{4/} Comptroller General of the United States, What is the Role of Federal Assistance for Vocational Education? Washington, D.C., U.S. General Accounting Office, December 31, 1974.

Many times, however, the counselors have neither the skills nor the necessary occupational information to effectively guide students toward relevant occupational programs. National and state studies have suggested that career counseling and guidance be given additional emphasis. For instance, a report to the Governor on vocational education prepared by the Job Development and Business Expansion Task Force stated:

The guidance and counseling process in intermediate and secondary schools and community colleges should change its emphasis and more specifically address the needs of students for job and related skills to prepare them for the world of work.

Office of the Auditor General

cc: Members of the Legislature
Office of the Governor
Office of the Lieutenant Governor
Secretary of State
State Controller
State Treasurer
Legislative Analyst
Director of Finance
Assembly Office of Research
Senate Office of Research
Assembly Majority/Minority Consultants
Senate Majority/Minority Consultants
California State Department Heads
Capitol Press Corps